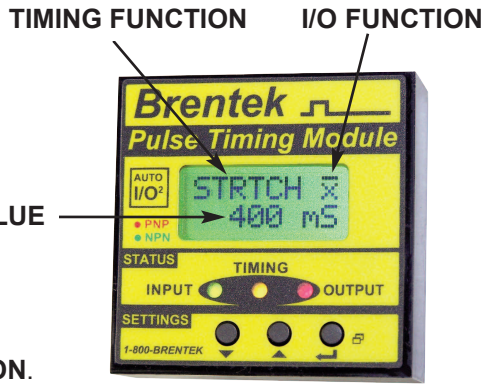
Brentek ENGINEERING QuickGuide

PTM-300U Quick Set-up Guide



This guide is to provide basic instructions on how to quickly get started and configure the **PTM-300U** Series Pulse Timing Module.

To configure the PTM-300U:

1. Hold the ⧉ button for ½ second. (selection flashes)
2. Use the ▼ and ▲ buttons to change **TIMING FUNCTION**,
3. Press the ↵ button to accept and advance to **I/O FUNCTION**.
4. Use the ▼ and ▲ buttons to change,
5. Press the ↵ button to accept and advance to **TIMING VALUE**.
6. Use the ▼ and ▲ buttons to change,
7. Press the ↵ button to accept **TIMING VALUE** and exit configuration (resumes normal operation).

(refer to PTM-Series Data Sheet for more detailed information)

TIMING FUNCTION

STRTCH - Defines a (TIMING VALUE³) output pulse length.
> Typical use: to lengthen or shorten a pulse. [same as INTRVL]

EXTEND - Adds (TIMING VALUE³) to the OFF-edge.
> Typical use: to extend a pulse. [same as DLYOFF]

MOTION - Retriggerable One-shot function. Time-out (for TIMING VALUE³) from last ON-edge.
> Typical uses: Watchdog Timer, Motion Detector, Underspeed detector. [same as WATCHDOG]

DLY-ON - Delay-ON (TIMING VALUE³).
> Typical use: Delay-on-make (power applied)

BUFFER - OUTPUT = INPUT (TIMING VALUE is always 000 mSec)
> Typical uses: Buffer input pulse, (can be used together with I/O FUNCTION to; Change signal polarity [H], Debounce input for 8 mSeconds [α])

I/O FUNCTION

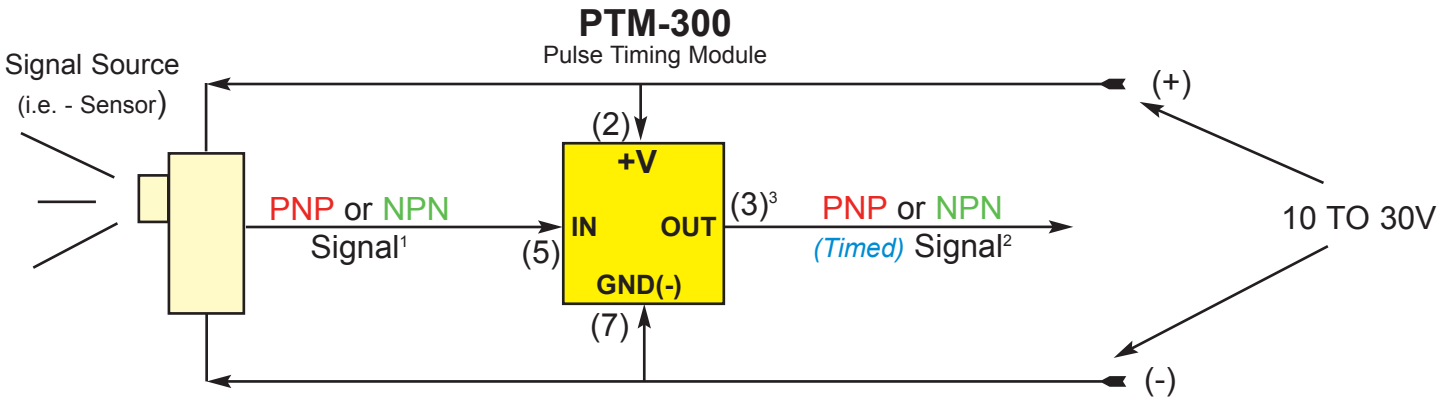
A - Normal Operation; Auto-detects input polarity to match same polarity output.
H - Inverts Polarity; Produces compliment NPN or PNP polarity output.
N - Forces output polarity to NPN only.
P - Forces output polarity to PNP only
α - Debounces input for approximately 8 milliseconds. Otherwise same as 'A' (above).

NOTES:

1. **IMPORTANT NOTE: Input is ignored and output is inhibited during configuration.**
2. **If no button is pressed** for 5 seconds, configuration is stored and unit will resume normal operation.
3a. Minimum stored TIMING VALUE is 10 milliseconds.
3b. TIMING VALUE is adjustable in 1 mS increments from 10 to 999 mS and 100 mS from 1 to 60 Seconds.
4. On-the-fly timing adjustments may be made in 'real-time' using the ▼ and ▲ buttons.
   IMPORTANT NOTE: Unstored timing changes will be lost if power is lost.
   (Unstored TIMING VALUES are denoted with an asterisk '*'.)
5. All LED indicators indicate 'real-time' status.

PTM-300/U Quick Wiring Guide

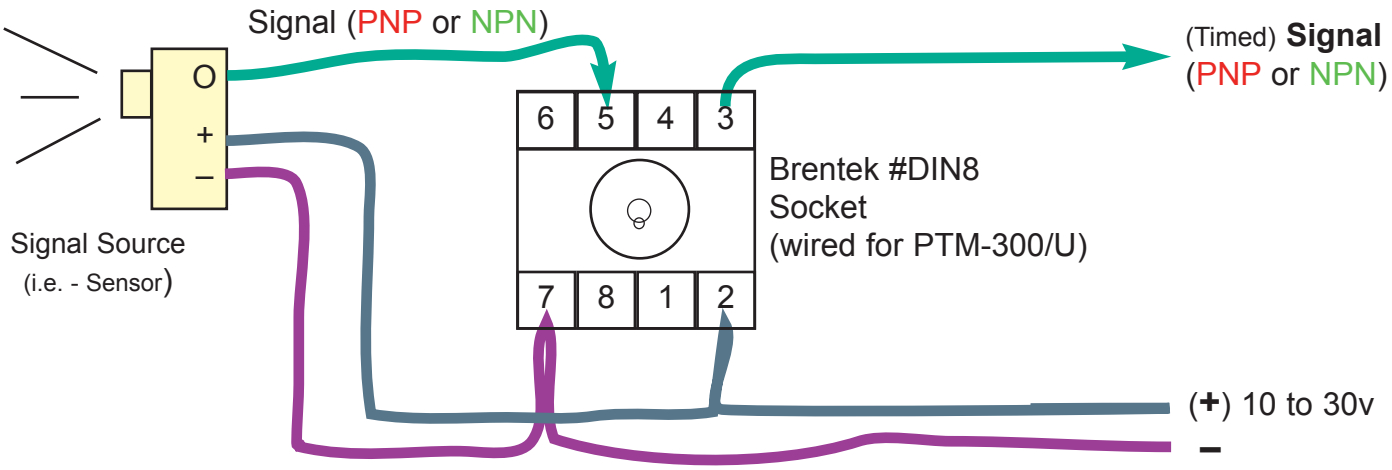
Schematic Diagram



Notes:

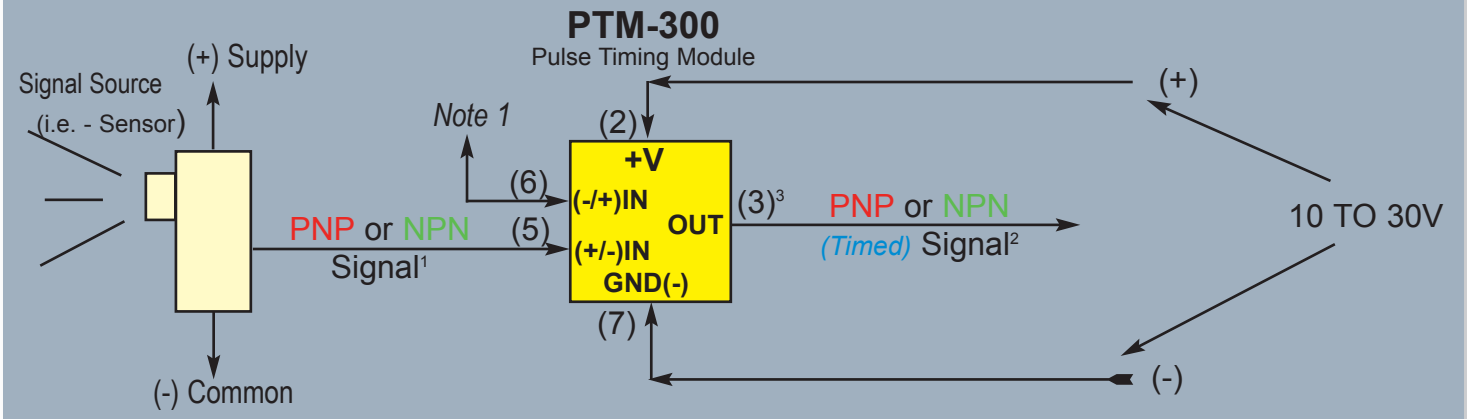
1. Signal to PTM-300 (pin 5) must be (unloaded) open-collector, current sourcing/PNP or current sinking/NPN.
2. Signal output from PTM-300 (pin 3) is true open collector and may be loaded to drive loads to 120mA DC.
3. PTM-300 output (pin 3) is short circuit protected.

Wiring Diagram



PTM-300/U Quick Wiring Guide (w/ -ISO & -ISO5 options ONLY)

Schematic Diagram (w/ -ISO & -ISO5 options ONLY)



Notes:

1. For sourcing/PNP signal sources, connect to (-) Common,
   or for sinking/NPN signal sources, connect to (+) Supply.
2. Signal output from PTM-300 (pin 3) is true open collector and may be loaded to drive loads to 120mA DC.
3. PTM-300 output (pin 3) is short circuit protected.

Wiring Diagram (w/ -ISO & -ISO5 options ONLY)